





ABOVE AND BEYOND—Colorado Highway 9 has long been a slaughterhouse for elk and mule deer, but wildlife overpasses and underpasses have cut wildlife collisions by 90 percent.

Saving Lives on Highway 9

Major Colorado wildlife crossings project slashes collisions along key deer and elk migration path.

new series of wildlife overpasses and underpasses in the nation's top elk state has reduced elk and deer collisions by 90 percent along a busy mountain highway through some of the world's most productive elk country.

Over the past decade, there have been more than 650 wildlifevehicle collisions recorded along a 10-mile stretch of State Highway 9, which is the main thoroughfare between the ski town of Silverthorne and the elk hunting mecca of Kremmling. The route divides important winter range for elk and mule deer along the Blue River and slices through key wildlife migration corridors.

Michelle Cowardin, area wildlife biologist with Colorado Parks and Wildlife (CPW), says she likes to remind people that these collision statistics not only represent 650 dead animals, but also 650 vehicle accidents, including some with injuries to the occupants. That equates to millions of dollars in vehicle repairs and medical bills, considering the Highway Loss Data Institute estimates that animal collisions cost an average of \$3,384, which is based primarily on white-tailed deer, not the larger mule deer and elk found crossing Colorado Highway 9. The U.S. Department of Transportation estimates that medical bills from collisions average \$2,700 for deer and more than \$5,400 for elk.

Aiming to cease this destruction, the \$52 million Colorado Department of Transportation (CDOT) Highway 9 Safety Improvement Project not only includes widening and straightening the roadway but construction of two wildlife overpasses and five wildlife underpasses to corral wildlife across a newly fenced-off 10-mile stretch. This ambitious effort is the first of its kind in Colorado.

The Blue Valley Ranch, which is bisected by the highway, contributed almost \$5 million to the project. The narrow stretch between mile markers 126 and 137 near the Green Mountain Dam Road and Colorado River Crossing where this project is centered has historically been the site of many collisions with deer and elk, Cowardin says, scattered fairly evenly along the entire stretch. But that appears to be changing in a hurry.

"After completion of phase one last winter, we only had three wildlife-collisions, down 90 percent from the 10-year average on that section of the highway," says Cowardin. "That compares to 37 collisions in the non-completed project area during that same time."

The first phase included installation of one overpass and three underpasses, as well as miles of high-fencing on both sides of the highway to usher animals under and over the new structures. It also included steel cattle-guard-style barriers at road and driveway entrances to keep animals off the roadway, and wildlife jump-outs (basically small dirt launch-ramps) in case animals make it onto the wrong side of those barriers and become trapped on the highway.

RMEF funds helped pay for the deployment of motiontriggered cameras at crossing structures and other wildlife features to document the project's effectiveness so future designs can be modified and improved. Phase two will include another overpass and two more underpasses, and is expected to be completed by the time you read this.

"CDOT and CPW are encouraged by the decrease in wildlife collisions in phase one and hope to see this downward trend continue this coming winter and into the future once the entire 10-mile project is completed," says Cowardin. project. Grand County applied for a CDOT grant, which required a 20 percent private match, or \$9.2 million, half of which was generously donated by the owner of Blue Valley Ranch. For its part, Grand County contributed \$3.1 million, and the rest was paid for by nonprofits, donations from interested private citizens, and by other nearby city and county governments.

"The most unique part of this project was not the wildlife



JUMP TO SAFETY—Tall fences keep wildlife off the highway and steer them to overpasses and underpasses, but if animals do get on the road, jump-out ramps allow a quick escape.

Despite their proven effectiveness, extensive highway wildlife crossings are far less common in North America than in Europe. But the more they take root across the West, the better the scenario should look for wildlife, motorists and hunters.

"It has an indirect effect for hunting recreation," says CPW wildlife biologist Kirk Oldham. "Highways can fragment wildlife habitats and migration corridors. With those impacts, elk and mule deer populations can be affected, and when the populations are reduced, the hunting recreation opportunities are reduced as well."

A remarkable private/ public partnership came together to help raise the funds for the features, but the partnerships," says Cowardin."

Blue Valley Ranch Manager Sherry Steuben agrees and sees their role as a civic duty and being a good neighbor.

"Almost everyone who lives in our community has either been involved in a collision or knows someone who has, and there have been many injuries and fatalities," she says. "The ranch decided it had to step forward and help."

While the price tag for such projects is daunting, the long-term benefits are undeniable.

"If you ask me, it's worth it, because we are saving human lives while we maintain connectivity for wildlife," Cowardin says.

—Mona Nazeri, Bugle Intern